

## REVIEWS.

ART. XII. *Surgical Essays, the result of Clinical Observations made at Guy's Hospital.* By B. B. COOPER, F. R. S., Surgeon to Guy's Hospital, Lecturer on Anatomy, &c. &c. &c. London, 1833. pp. 281, 8vo.

THERE are few works possessing more interest for the profession than those which detail with accuracy the result of hospital practice. They furnish us with a clear view of the existing state of medical knowledge among the distinguished practitioners of the age and country in which they are written; they furnish the best tests for ascertaining the comparative merits of conflicting doctrines, and when measures are exploded and their teachers no more, they remain as the most efficient materials in the hands of the historian of the science, for determining the extent of gratitude due by posterity to those who have truly aided the cause of humanity. In France, of late years, much has been done in this department; cases are detailed with the utmost care, and the appearances after death are described with a degree of minuteness that seldom leaves any thing to be desired which can be known in the existing state of physiology. These narratives, given by men of deserved eminence, are drawn up under the eyes of numerous and competent observers, and are afterwards laid open to the rigorous censorship of rivals who seldom leave untouched a single debateable point either in fact or theory. The consequences of this system are obvious; French hospital practice is much better known abroad than that of any other country; the clinical observations made at L'Hotel-Dieu, La Pitié, La Charité, the Hospital of Montpellier, &c. are mostly within our reach; the vast accessions of pathological knowledge thence derived are universally acknowledged, and of the value of the therapeutical treatment pursued in those institutions all are enabled to judge for themselves.

Our information with regard to the medical institutions of Great Britain is much less complete, both as to the number of cases published, and as to the fulness of the detail, and we hail the appearance of this little work, by the nephew of Sir ASTLEY COOPER, because it in part supplies the deficiency. These essays consist essentially of a series of highly important cases, covering considerable

ground in some of the most interesting departments of surgery; they treat of fractures, diseased joints, dislocations, and wounds of the abdomen. The arrangement of the work deserves decided praise. Each essay is preceded by some short notice of the general principles which should govern the treatment of the class of accidents of which it treats; then follow numerous cases illustrative of those general principles, and to almost every case is appended some remarks with regard to its especial application. A collection so various in its character scarcely admits of analysis, and we shall attempt nothing further than a running commentary upon such passages as strike us in a novel or particularly interesting point of view.

The author commences with some remarks "*On the Physiology of the Growth and Reparation of Bone.*" Referring to his work on anatomy, previously published, for a more detailed account, (which, unfortunately, is not a great deal more detailed,) of the physiology of the osseous tissue, he presents us with seven pages on the application of this subject to the treatment of fractures. We are happy to observe that the terms *table* and *fibre* are rarely employed in this article, nor is much said of rings or plugs of callus in the cure of fractures. We wish not to express an opinion that these terms, when attended by the necessary definitions, are wholly inapplicable to the structure of bone, but mere names have often exerted an important influence upon practice, and the crude and mechanical notions of the earlier anatomists, together with the distant and almost wild analogy of DUHAMEL, have associated in the minds of many the ideas of the tabular and fibrous arrangement of bone, with certain forms of inorganic or of vegetable matter, to the no small prejudice of the treatment of its accidents and diseases. The truly cellular structure of all parts of the skeleton, inferred by HALLER, more clearly described by HOWSHIP, BICHAT and his followers, and experimentally proved by SCARPA, is clearly enforced by Mr. Cooper, in terms which at once foreclose the much vexed question as to the comparative importance of the periosteum, the medullary membrane, and the solid texture in effecting the reparation of bone in fractures. He speaks of the internal and external periosteum and the cellular tissue connecting them collectively by the one general term *periosteum*, (p. 9,) and he considers it as enclosing the bone in the same manner in which the neurilema encloses the substance of a nerve, or in which the cellular sheath and its septa enclose and divide a muscle, its fibres, and the globules of which those fibres are composed. Nor does he neglect the facts, that the osseous tissue, thus constituted, is subject to all the vital laws which govern other parts, and that in cases of

necessity other parts and organs may be converted into periosteum, and contribute to the reproduction of osseous matter.

In speaking of the gradual development of the various parts of the skeleton, so strictly regulated by the increasing wants of the animal—those first employed being always first perfected—he rejects all explanation founded on that metaphysical abstraction of JOHN HUNTER, “*the stimulus of necessity*,” and advances the position which, if memory serves us, is also advocated by Sir Astley, that the exercise of the function of a part is the proper stimulus to ossification in that part. It is to be feared that in assuming this position he has fallen into the very error he endeavored to avoid, and has trespassed a little beyond the barriers which should limit physical research. Be this as it may, we feel bound to contend against the practical directions given in accordance with this supposed law. He recommends that in pseud-arthritis, the limb should be supported by a suitable apparatus, and the patient directed to employ it as usual, in order that the shocks, the pressure, the “stimulus of exercise,” should bring about the ossification of the callus. This is an error, even in the application of the law, for the effect of such treatment is evidently to cause repeated and irregular motion in a part designed to be constantly in a state of relative rest—to cause the fragments of a bone to perform functions for which nature never designed them. Motion in an ununited fracture can seldom be entirely prevented by mechanical contrivance, while the limb is exercised with any degree of freedom. Now, motion being the proper function of a joint, the law laid down, if it be general in its application, should lead us to infer that the treatment prescribed would tend to produce a joint, or, in other words, that it should diminish rather than increase the strength of union in a pseud-arthritis. Experience has taught us that such is the effect in many cases, and if the plan prescribed does occasionally answer the end in view when the union has already acquired considerable firmness, the fact may be explained on different principles. These remarks are in strict accordance with the views of Mr. Cooper himself. “The elasticity of cartilage,” he says, “is maintained by the constant concussion produced by exertion,” (p. 5,) and it is singular that he should not have perceived the inconsistency between the proposition above stated, and the practice which he has founded on it. The subject is an important one, and we may be excused perhaps for one additional remark. There is no rule of practice better established than that repose of the fragments is necessary to the union of a fracture, and this fact should never be lost sight of when we attempt the cure of pseud-arthritis by producing

friction between the extremities of the bone. The proper degree of irritation once effectually produced, it is wholly unphilosophical to continue the painful and repeated frictions sometimes employed, which must retard instead of accelerating the ossification.

The next subject taken up by Mr. Cooper is that of "Fractures in General," under which head he includes many particular fractures, a very considerable number of cases in full detail, and indulges in many collateral remarks on injuries of the viscera resulting from fractures of the cranium, ribs, and pelvis; the whole subject being embraced in one hundred and twenty pages. Of course little space is allowed for dilating on general principles, and too much is frequently sacrificed for the sake of brevity. The cases constitute the most valuable part of this as of all the other essays.

Our space compels us to pass rapidly over the surface of the work, confining our view to such points only as rise up in strong relief and enforce attention. After a very hasty outline of the distinctive marks of compression, concussion, inflammation, and abscess of the brain, occasioned by fracture of the cranium, the author says—

"The treatment of both concussion and compression are the same so soon as reëction has taken place; which, however, is sometimes so slow in making its appearance, that it becomes necessary to employ stimuli, to restore the patient sufficiently, that he may be enabled to bear the means necessary to be employed." p. 13.

Then follows an enumeration of the vigorous antiphlogistic and concomitant treatment required in the sequel, such as a purge of calomel, bleeding *from the temporal artery or jugular vein*, cold to the head, sinapisms to feet, small doses of sulphate of magnesia frequently repeated until the bowels are freely opened, and, finally, a blister to the scalp, if the application of cold proves inefficient. Mr. Cooper then demands, "If all these means fail, under what circumstances is the trephine to be applied?"

This complete intermingling of accidents so dissimilar in character as simple concussion and simple compression of the brain, is to us somewhat startling. In the former, the first indications of treatment are obviously the restoration of the nervous energy, diminished by the direct effect of the injury at the moment of the accident, and kept up simply by the consequent weakness of the part without any continued mechanical cause. If the powers of nature are insufficient to accomplish this purpose without assistance, it may be proper sometimes, but certainly rarely, to call in the aid of stimuli; when reëction is once established, the measures laid down, with the exception, perhaps, of the choice of vessels for bleeding, will be

approved by every one. But in the second class of accidents, we have the action of a continued mechanical cause, which, in a large majority of cases, can only be opposed by mechanical treatment. If the symptoms of compression are clear and decided before reaction, what is to be gained by delay? Above all, upon what principle can we defend the exhibition of stimuli to favour reaction under such circumstances? When reaction comes on, and is followed by urgent symptoms of compression, if the cause and location of that compression can be detected, every thing calls for promptitude in the employment of mechanical means, without waiting to ascertain whether the measures laid down for combating reaction will fail or not. We believe that the trephine is employed unnecessarily in many cases, but it is more than probable that the mortality following the operation, when imperatively demanded, is in no small degree owing to the tardiness of many operators. Without feeling disposed for a moment to charge the author with a disposition to unnecessary delay in practice, we cannot but consider the work calculated to lead other less experienced men into this fault. The error is almost a necessary consequence of the attempt to lay down in four short pages the distinctive characters and proper treatment of a class of accidents of the most difficult and perplexing nature, and which could not be properly discussed within the space devoted to the whole essay.

In the remarks upon fractures of the pelvis there is nothing to arrest us particularly, but among the cases appended to this section on injuries of the flat bones, are several of very high interest. The first is a case of fracture of the basis of the cranium, accompanied by slight depression of a portion of bone at the posterior, inferior angle of the right parietal bone. The symptoms of compression were urgent. A fragment was removed by Hey's saw, and the remainder was elevated. Some overlapping of the fragments continued, but all signs of compression disappeared, and though the patient was afterwards strongly threatened with inflammation of the brain and its meninges, he promptly recovered. This case beautifully illustrates the fact that a very slight depression may sometimes produce very serious danger, and that fractures confined almost entirely to the basis of the cranium, are not always beyond the reach of mechanical relief. The next case, and the remarks on it are intended to show that a serious discharge from the ear in injuries of the base of the brain, renders the prognosis more favourable. The third is very singular—a gig wheel passed over the head of the patient, and the occipital bone was completely divided from its apex to the foramen magnum in a

perpendicular direction! doubtless by the effect of the side-thrust of the lateral arches of the cranium, constituting one of the varieties of contre-coup. The case terminated in death from hæmorrhage on the base of the brain. Passing over a case of hernia cerebri, with some interesting remarks which we cannot pause to analyze, we find a very interesting operation for a disease of the os frontis produced by several blows upon the part occurring at distant intervals of time, and giving rise to epilepsy and partial paralysis; a perfect cure was effected by the removal of the diseased bone at least one year after the last accident. The inner table of the cranium was greatly and very unevenly thickened, and rendered like ivory in hardness. This section closes with two cases of fracture of the pelvis and one of diastasis of the symphysis pubis. The last case was productive of permanent irregularity of the superior anterior spinous processes of the ilium, but the consequent lameness was slight.

The succeeding section treats of *fractures of the spine*. Mr. Cooper, in speaking of operations for elevating depressed portions of vertebra in cases of compression on the spinal marrow, such as have been performed by Mr. CLINE and Mr. TYRRELL, but have been most strenuously opposed by Mr. CHARLES BELL, expresses his belief of the general hopelessness of such cases, but thinks the operation sometimes warrantable. p. 40. We do not recollect that it has ever been successfully performed in America. Among the diagnostic signs of injury to the spinal marrow, Mr. Cooper enumerates a suffusion of the countenance, a symptom that he has not seen mentioned by other authorities, and which he attributes to the imperfect decarbonization of the blood consequent upon the embarrassed state of respiration. This symptom has been strongly marked in several cases which we have seen of concussion of the spine high in the dorsal region, but which have terminated favourably. In similar injuries about the lower dorsal and lumbar vertebra it has not been remarked, and it would be interesting to know if it is attendant upon fracture with depression in those portions of the column. Among the cases narrated is one in which there existed no fracture, but a laceration of the intervertebral substance between the fifth and sixth cervical vertebra, and death followed the usual train of symptoms attendant on fracture, although there was no lesion of the spinal marrow, and but slight marks of inflammation of the dura mater.

On *fractures of the ribs and sternum* there are a few remarks and some interesting cases which we pass unnoticed that we may not prove too prolix, although some of the aphorisms of the author afford room for debate. Under the head of *fractures of the short bones*, how-

ever, there is detailed one case so extraordinary that it must be mentioned. It is that of a woman thrown down by a horse in full career.

"All the soft parts of the right side of the face were detached from the bones, which were most extensively fractured. The lower jaw was fractured in two places, the superior maxillary and palate bones were broken through their palatine processes, so that the roof of the mouth fell upon the tongue, and a fissure extended through the body of the superior maxillary bone, into the antrum, and upwards into the orbit; the malar bone was broken through, so that the zygomatic arch was flattened; the bones of the nose were driven in, and in fact, it may be said that every bone on that side of the face was fractured, and many comminuted." p. 60.

In this horrible case the comminuted portions of bone were removed, the side of the face denuded of its integuments, which are still preserved in the museum of Guy's, was covered with lint and kept cold by allowing water to fall constantly upon it. Antiphlogistic measures were steadily pursued, and the patient recovered "without a single bad symptom supervening." Numerous portions of bone, however, exfoliated, and protracted the cure.

Mr. Cooper next proceeds to give some general observations on fractures of the long bones, and some of his remarks are highly important. He particularly blames the unreasonable habit of most surgeons in giving preference to one particular machine or position in the treatment of all the varieties of fracture which may occur in any one bone. There are indeed but few among the vast variety of contrivances for the treatment of fractures that may not prove occasionally valuable, and there are certainly none which enjoy superior merit in all the accidents of this nature occurring in the limb or part for which they are designed. The surgeon who would invariably employ either of the modifications of the splints of WHITE, DESAULT, or BRUNNINGHAUSEN, in all fractures of the thigh, whether seated just above the condyles, just below the trochanter minor, or in the middle of the shaft, would lay himself open to well-deserved censure.

In speaking of fractures of the femur within the capsule of the hip-joint, he defends the peculiar views of his uncle, upon the possibility of bony union in such cases, against the hostile reasonings of Mr. EARLE. We shall not enlarge upon this much-vexed subject, but cannot forbear the remark that the weight of the thirty years experience of Sir ASTLEY COOPER, great as it unquestionably is, looses a portion of its value, when it is remembered that the plan of treatment pursued by that surgeon is not at all calculated to preserve that accurate coaptation and permanent immobility of the fragments so necessary to the accomplishment of complete reünion in any fracture, how-

ever situated: and although the practice of placing the limb in a gently-flexed position upon a bolster and pillow may be a very comfortable one in hopeless cases, we cannot regard it as calculated to reduce the consequent lameness to a minimum even when the union is ligamentous. Sir Astley admits that in fractures of the neck of the femur unattended with complete disruption of the periosteum, bony union may take place; but when Mr. B. B. Cooper asserts that all the cases brought forward in opposition to the views of the former surgeon are of this character, we conceive that he begs the question, for according to our memory, the remarks of M. Roux and others who have taken part in the controversy, by no means permit the establishment of this fact beyond the possibility of doubt. Without attempting to pronounce a decision on the question at issue, we may mention that we have certainly seen an undoubted case of fracture within the capsule with very considerable shortening and eversion of the limb, and consequently with complete rupture of the periosteum, cured at the Pennsylvania Hospital without material lameness or perceptible extensibility of the bond of union, by means of *PHYSICK'S* modification of *Desault's* splint; a result hardly to be expected in treating any case treated without the aid of any apparatus, as is recommended in the work before us. There is a very interesting case given by the author, in which the periosteum was so little injured that the coaptation of the fragments continued perfect. The limb was not confined, but was on the plan above noticed, and at the end of fifteen days when the patient died, the usual cup and ball pseud-arthritis peculiar to this fracture was already far advanced, showing the injurious effect of motion under the very circumstances which are acknowledged on all hands to admit of bony union. p. 72.

At page seventy-three we are presented with one of the rarest accidents of the femur; namely, fracture detaching the trochanter major from the body and neck of the bone. After some time and much difficulty the character of the accident was detected by means of the contracted and knotty appearance of the gluteus maximus muscle, and coaptation was so nearly completed and maintained, by attention to position and the application of compresses and bandage, that scarce any trace of lameness remained. The case is one of very high interest, and reflects great credit on the surgeon. We are the more anxious to acknowledge this, because we are now about to enter upon the description of accidents touching the mechanical treatment of which there can be little accordance between the English and American schools of surgery. The influence of the prejudice of *POTT* in favour of an undue dependence on mere position in fractures, and a



certain degree of national antipathy to French surgery, have thrown the profession in Great Britain far behind the rest of the world, in the management of fractures requiring continued extension, and though both these causes have almost ceased to operate within the last few years, long-continued habit renders the necessary reform but too gradual in its progress.

"When the fracture is very oblique," says Mr. Cooper, when speaking of fractures about the middle of the shaft of the femur, "it almost invariably requires the straight and continued extended position to maintain the fractured extremities of the bone in apposition; but on the contrary, when the fracture is very transverse, the surface of the upper fractured portion offers a sufficient and convenient obstacle to the lower portion being drawn upwards and inwards by the muscle." p. 78.

To the first clause of this sentence almost every American surgeon will yield a ready assent, and it is only to be regretted that the requisition is not so strictly attended to, as might be thought desirable, even in the cases afterwards detailed. But with regard to the second clause we cannot omit some remarks, in which we are compelled to disagree not only with Mr. C. but with the whole weight of systematic authority. In the first place then we do not believe that it is possible to determine, except perhaps in cases of great emaciation, when a fracture in the middle of the shaft of the femur is really transverse; unless it is assumed that the absence of longitudinal deformity is a proof of the transverse direction of the fissure, and the presence of such deformity an equally certain indication of its obliquity; neither of which positions is tenable. A limb may retain its full length, after very oblique fracture of the shaft of the femur, in consequence of the feeble action of the muscles produced by the collapse in severe injuries, as we have seen in a case in which the near approach of the superior fragments to the skin, consequent upon extensive laceration of the muscles, placed the character of the accident beyond a doubt. We have also met with a case of complete comminution of the femur from within three inches of the trochanter minor to a point about equally distant from the condyles, unattended with any shortening of the limb. In neither of the cases was it possible to account for the absence of overlapping by supposing the soft parts to have lost their contractile power permanently, for they terminated favourably without lameness.

In the second place, supposing the fracture to present every symptom of a transverse direction, nay, even granting that it is absolutely proved to be so, there is no efficient protection against longitudinal deformity, without the aid of mechanical measures. If no attempt is

made to retain the proper direction and length of the limb, by other means than simply laying it in a flexed position, or placing it on an inclined plane, the bone is constantly liable to lateral derangement from slight changes of posture, or from unequal or convulsive action of the muscles, under which forces the ends of the fragments are rendered relatively oblique, although they continue perpendicular to the axes of the corresponding fragments. Again, supposing the parallelism of the extremities to be steadily preserved, the constant, though slight rotations of the limb which cannot be prevented, have a tendency to twist the fractured surfaces in one direction or another, and may very readily destroy their apposition. We have indeed seen cases of temporary interlocking of the fragments, preventing not only the shortening of the limb, but even the eversion of the toes, and it is evident that this *may occur* as well in oblique as in transverse fractures. In nine cases out of ten, the mere attempt to determine the direction of the solution of continuity would destroy the correspondence between the ends of the bone in transverse fractures. We have carefully observed at least sixty cases of fractures of the shaft of the femur, occurring during the last fourteen years, with reference to this particular question, and in no instance have we noticed a case which did not sooner or later require permanent extension and counter-extension. Even supposing the general impression on this subject to be correct, a moment's thought would show that the extended position is peculiarly adapted to transverse fractures, on the very principle laid down by Mr. Cooper himself. Here, on the hypothesis, there would be a disadvantage in the double-flexed position, for the apposition of the fragments effectually resisting the disposition to shortening, the whole force of the muscular contractions tend to increase the pressure which he regards as so favourable to ossification, and surely there can be no more certain means of preventing every other species of deformity than the application of inextensible extending, and counter-extending bands, without force, but with sufficient firmness to prevent all changes in the direction of the limb. This distinction in practice between transverse and oblique fractures of the femur, has been copied from work to work without sufficient examination, and is calculated to deceive the inexperienced. We can see no advantage in the knowledge of the direction of the fracture; the proper rule of treatment is a plain one. If the limb retain its length, it should be prevented from contracting; if it be shortened, it should be brought down to its correct dimensions, and both these ends are best accomplished by placing it in the straight position. In fractures of the tibia, where the outline of the bone is easily felt, and its dimensions are greater, the distinction is much more important.

Among the curious cases of fractured thigh narrated in this section, there is one of threatened pseud-arthritis, in which the propriety of excising the extremities of the bone was discussed in consultation, and its performance submitted to the judgment of the patient. Pressure on the seat of fracture was twice ineffectually made by means of a leather strap and buckles! and was finally relinquished in consequence of the usual inconveniences of partial ligatures upon a limb. What most astonishes us in this case is the proposal of so terrible and doubtful an operation, before the trial of frictions of the fragments on each other, stimulation of the neighbouring parts, seton, or any of the now well-known and often highly successful plans of treatment for pseud-arthritis! It is an instance of the injurious effect of the application of hypothetical ideas to practice in preference to the results of actual observation. More than eighteen months after the accident, the union being still incomplete, the patient was ordered to use the limb, in order to effect "perfect consolidation, by inducing earthy deposition through the natural stimulus to its growth; namely, *motion and pressure!*" The case is still pending, and the result, consequently, can only be inferred.

In the remaining details with regard to fractures of the inferior and superior extremities, we meet with much deserving of notice, and the cases possess considerable interest. The remarks on the pathology and diagnosis are often important and valuable, and the mechanical treatment throughout seems to be regulated upon principles similar to those laid down by Sir Astley Cooper in his great work on Fractures and Dislocations; they differ widely from those most popular on this side the atlantic.

The essay on diseases of the joints occupies thirty-three pages, and contains, in addition to a very rapid, but clear outline of pathological principles, a number of cases in illustration of them. They are valuable, but offer too little novelty to detain us. That on dislocations is extended to ninety-three pages, and contains short notices, seriatim, of most possible accidents of this character. The general remarks in each section of this essay are avowedly quoted, chiefly from the great work of Sir A. Cooper on the same subject, which is already so well known to the profession that it is needless to attempt an analysis. The cases are numerous, curious, and interspersed with many pertinent commentaries, and the whole presents a general view of the opinions of the eminent surgeon just mentioned, which cannot but prove desirable to those who wish a compendious view of those opinions with novel illustrations, but without the numerous and costly plates of the original.

The work closes with a very short essay on wounds and injuries of the abdomen, chiefly important for the cases of rupture of the abdominal viscera without any wound of the parietes. In one most singular instance of this kind the kidney was extensively lacerated without the occurrence of any fracture or external wound, and the case proved fatal from the internal hæmorrhage which followed. Mr. Cooper observes that the collapse which follows laceration of a bowel is sometimes absent immediately after the accident, but appears immediately upon the extravasation of fæcal matter, of which the collapse is strongly diagnostic in such cases. Several instances are mentioned in support of this position, and one among others, in which an intestine was ruptured by a kick, in a scrotal hernial sac. Collapse and death from extravasation followed the reduction of the hernia. Upon this observation he founds this rule—

“A person having received an injury of the abdomen attended with symptoms of prostration, at the same time having a hernial tumour, that the contents of that tumour are not to be returned into the abdominal cavity; but that as soon as the reëction has taken place the strict antiphlogistic plan is to be adopted, leaving it to nature to repair the injury any viscus may have sustained; for should the contents of the hernial sack be injured, and even the intestine lacerated, as in this case, nature would immediately shut up the hernial from the general cavity of the abdomen, and the contents of the bowel would be poured out only into the sac, indicated by the sudden swelling of the part, and the relief experienced by the evacuation. A cure is then to be effected by opening the tumour, discharging its contents, and treating it as an artificial anus.” p. 277.

The greatest defect in this essay is the light manner in which the contusions of the abdomen not complicated with rupture or laceration of the viscera are noticed. Mr. C. acknowledges that they are sometimes productive of collapse, but remarks that they almost always recover under proper depletion *in anticipation of inflammation*, a measure of which he directs adoption immediately on the subsidence of the stage of depression, when the surface becomes warm; suggesting that stimulants may be given in some cases to bring about this condition. “No detail has been preserved of these usually trivial accidents.” Now, there are no cases more perplexing to the surgeon, or more deserving of close examination and research, than these very accidents. How often do we see patients who have been buried under masses of earth, or whose abdomens have been compressed by great weights, dying in collapse without any distinct marks of peritoneal or other inflammation, even though they survive forty-eight hours or longer; and how often on the contrary do severe blows, acting on a smaller portion of the parietes, but with no obvious lesion

of any viscus, occasion death in half that time, from collapse equally profound, yet causing the intestines to become agglutinated and the abdominal cavity filled with masses and flocculi of coagulated lymph! Can stimuli be equally proper under circumstances so widely different? If not, how are we to perfect our diagnosis? We do not presume to answer either of these questions, but the subject is much in want of further elucidation. It should always be borne in mind in the treatment of surgical injuries, that collapse may be produced either by such general mischief to the whole nervous system as may directly oppress all the vital operations, or from such an excessive irritation as may concentrate, as it were, the whole vital energy of the system upon a point.

In taking leave of the work of Mr. Cooper, we cannot but express our regret at its want of clearness in style. With regard to matter, much might have been added in the way of praise and dissent, but we sincerely hope that other occasions will be offered from the same quarter hereafter, and that the clinical observations of London hospital practice may continue to be made public from time to time in a manner equally clear and impressive. One word to those who enjoy similar advantages in our own institutions. Why are the results of the practice of our own hospitals confined almost within the limits of their walls? The work of Mr. Cooper, while it informs us how much we might communicate with advantage to the profession, furnishes us in its arrangement with an excellent model for imitation.

R. C.

ART. XIII. *Leçons de Clinique Médicale faites à l'Hôtel-Dieu de Paris*, par le Professeur A. F. CHOMEL, Recueillies et Publiées sous ses yeux, par J. L. GENEST, D. M. P., Ancien chef de Clinique Médicale de l'Hôtel-Dieu, &c. (Fièvre Typhoïde.) 8vo. pp. 548. Paris, 1834.

*Clinical Lectures on Typhoid Fever, delivered at the Hotel-Dieu of Paris.* By Professor CHOMEL, Collected and Published under his Inspection, by J. L. GENEST, M. D. &c.

UNDER the denomination *typhoid*, Professor CHOMEL includes all the severe grades of continued fever, in consequence of the presumed analogy which exists between their general phenomena and those of the typhus fever of camps. However dissimilar, he remarks, the several varieties of continued fever may appear in many of their symp-